

A NEW PISONIA (NYCTAGINACEAE)  
FROM THE HAWAIIAN ISLANDS

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*Pisonia wagneriana* Fosberg, new species.

*Pisonia* valde affinis *P. umbellifera* (Forst.) Seem. praeter cymas juniores et perigonias in alabastra pilosa, alabastra masculina subacuta, hypanthia turbinata costata, cymas fructificantes expansas, ramificationes cymarum habentes ad articulos nodas-aggregatas parvulas.

Tree 7-10 m tall, "several trees grouped together", habit of *P. umbellifera*, perhaps fewer internodes compressed together, no more than 4 leaves at an aggregate node, glabrous, stem appearing fistulous, squarish, internodes 2-9 cm; leaves spatulate-ovate, blades to 30 x 9.5 cm, apex rounded to shortly and rather abruptly acuminate, base gradually cuneately contracted decurrent on the short (1-2 cm) petiole, venation not prominent, 8-10 nerves on a side, forking once or twice and anastomosing toward margin, network obscure; staminate cymes slender, shortly pilose, to 20 cm long, peduncle to 15 cm, 3 times umbellate, 3-5 rays in an umbel, to 6 cm long, ultimate triads with buds subsessile to pedicellate, a very small pubescent scale-like bractlet at base of pedicel or part way up, or at base of receptacle; perianth in bud pointed, cylindric-campanulate to funnelform campanulate at anthesis, tube 2.5 mm long, ribbed, turbinate, lobes 4, ovate, equalling tube, spreading to recurved, slightly puberulent externally, glabrous within, margins papillose, slightly thickened, crispate when dry, apices acutish; perianth-lobes and filaments white; stamens 6-9, exserted to twice length of lobes, anthers orbicular, pistillode exserted about 2 mm, stigma somewhat enlarged, recurved or hooked, apex papillate-puberulent, at least on concave part of apex; pistillate cymes, at anthesis, 5-6 cm long, on very short branchlets, several of these of different ages from one aggregate node, peduncle slender, 4 cm long, minutely puberulent, with 2-4 short branches, these ending in irregular umbellules of 4-7 very shortly pedicellate flowers, or very shortly branching again, each ramification originating in a miniature "aggregate node" with scars of bracts and branchlets or pedicels, the pedicels 1-3 mm, elongating in fruit to as much as 7 mm, dilating gradually into receptacle, pistillate perigone at anthesis tubular or slightly prismatic, tube 4-5 mm long, slightly thicker at base or not, very minutely puberulent, lobes 4, ovate, somewhat spreading, thick, about 1.5-1.7 mm long, margins papillate puberulent, glabrous within, staminodia 5-6, antherodia oblong, 0.5 mm long, included

or almost so, style glabrous, slightly exceeding perigone tube, stigma much branched, the branches capillary and somewhat plumose, the whole like a minute mop or feather duster; fruiting cymes very open, to 20 x 15 cm, peduncle to 11 cm, anthocarps (not quite mature) about 4 cm long, basal half slightly swollen, distal half narrow, cylindric, "rostrate", lobes thick, indurate, somewhat spreading. inner edge prolonged slightly beyond the thickened margin, whole anthocarp somewhat 4-sided, slightly 4-carinate, very viscous.

This species would be included in Pisonia umbellifera (Forster) Seemann, sensu latissimo, but seems closer to some of the Society Islands members of this affinity than to the variable Hawaiian species commonly considered to be P. umbellifera. Characters that set this species off are the somewhat pointed rather than rounded staminate buds, pilose staminate cymes, turbinate and ribbed, rather than campanulate staminate perigone tube, with lobes as long as tube, fruiting cymes with miniature aggregate nodes at ramifications. This latter tendency is also apparent in at least two Oahu collections of P. umbellifera, Yuncker 3234 (US) and Fosberg 10798 (US). Some intergradation seems to be found between most species of Pisonia sect. Prismatocarpa. Further field study of populations of Pisonia on windward Kauai should either strengthen and better define this taxon, or show it to merit a lower rank.

Named for Dr. Warren L. Wagner, of the B. P. Bishop Museum, Honolulu, in recognition of his work in producing a Guide to the Hawaiian Flora.

Specimens examined:

HAWAIIAN ISLANDS: Kauai: "Maunahina, Wainiha, 3--325 m", Earle 49 (BISH); Limahuli Valley, along stream in very rocky area, 770 ft, 17-XII-1985, T. Flynn & M. Bergau 1453 (PTBG, holotype, 2 sheets); 1100 ft. Perlman & Wichman 204 (BISH); Power trail, 650 m, MacDaniels 696 (BISH).